



SPECIFICATIONS AS490e

DESCRIPTION

A 2-way mid/high system in a trapezoidal enclosure. Includes a horn-loaded 10-in MF cone with Radial Phase Plug™ and a 1.4-in exit/2.5-in voice coil HF neodymium compression driver on a 90° x 45° constant directivity horn. Powering mode is selectable: bi-amplified or passive MF/HF crossover.

APPLICATION

The AS490e is engineered for use in permanent installations. It provides the mid/high performance capabilities of the 90°(h) ASe Series systems in a separate mid/high module. It can be used as a stand-alone system for speech-only applications or, together with an AS415e, AS422e or AS625e LF module, provide full range performance in a flexible, modular, multi-enclosure format. Includes comprehensive 3/8"-16 threaded mounting/suspension points. Six year warranty.

Applications include:

Stadiums	Arenas
Performing Arts Centers	Houses of Worship

PERFORMANCE

Frequency Response (Hz)		
±3 dB	200 Hz to 15 kHz	
-10 dB	180 Hz	
Axial Sensitivity (dB SPL, 1 Watt @ 1m)		
Passive MF/HF	107	
MF	109	
HF	109	
Impedance (Ohms)		
Passive MF/HF	8	
MF	8	
HF	8	
Power Handling (Watts, Continuous)		
Passive MF/HF	450	
MF	400	
HF	125	
Recommended High-Pass Frequency		
24 dB/Octave	200 Hz (speech), 300 Hz (with LF)	
Calculated Maximum Output (dB SPL @ 1m)		
Passive MF/HF Peak	139	
MF Peak	141	
HF Peak	136	
Passive MF/HF Long term	133	
MF Long Term	135	
HF Long Term	130	
Nominal Coverage Angle, -6 dB Points (degrees)		
Horizontal	90	
Vertical	45	



PHYSICAL

Product Group	I	
System Configuration	2-way, mid/high	
Powering Configuration(s)	Bi-amplified or passive MF/HF crossover	
MF Subsystem & Loading	1x 10-in cone, Radial Phase Plug™/horn-loaded	
HF Subsystem & Loading	1x 1.4-in exit/2.5-in voice coil neodymium compression driver on constant directivity horn	
Cabinet Type (shape)	Trapezoidal	
Enclosure Materials	Exterior grade Baltic birch plywood	
Finish	Wear-resistant textured black paint	
Connectors	2x 6-Contact terminal barrier strip, jumpers used for powering configuration	
Suspension Hardware	(18) 3/8"-16 threaded mounting points (4 each top, bottom and sides, 2 on back)	
Grille	Powder coated perforated steel	
Dimensions	inches	millimeters
	Height	22.5 572
	Width (front)	24.6 626
	Width (rear)	12.3 312
	Depth	23.0 584
	Trapezoid Angle	15 Degrees per Side
Weights	pounds	kilograms
	Net Weight	95 43.2
	Shipping Weight	110 50.1

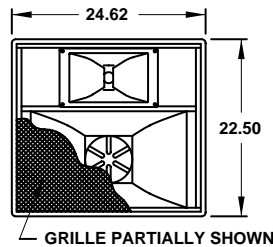




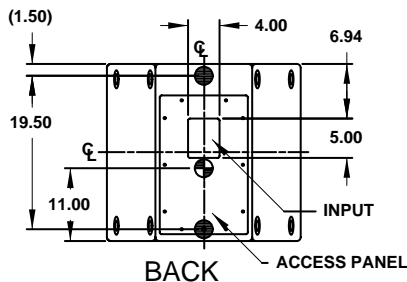
SPECIFICATIONS AS490e

DIMENSIONAL DRAWING

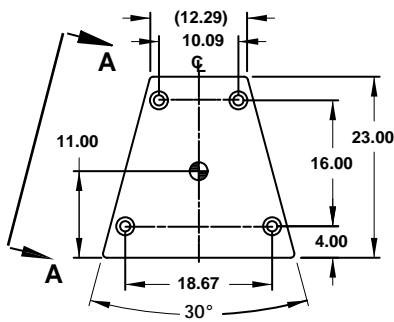
- ⊙ INDICATES MOUNTING POINT, 3/8-16 THREADED HOLE (PI ANGLE).
- INDICATES MOUNTING POINT, 3/8-16 THREADED HOLE (NUT PLATE).
- ⊕ SYMBOL INDICATES CENTER OF BALANCE.



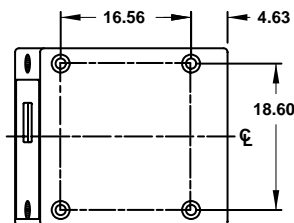
FRONT



BACK



TOP/BOTTOM



SIDE VIEW VIEW A-A

DIMENSIONS APPLY TO BOTH SIDES

A & E SPECIFICATIONS

The bi-amplified or passive mid/high loudspeaker system shall incorporate a horn-loaded 10-in MF cone with Radial Phase Plug™ and a 1.4-in exit/2.5-in voice coil HF neodymium compression driver.

The MF driver shall be loaded into a midrange horn constructed of 1/8-in birch plywood backed with high density polyurethane foam. The HF driver shall be loaded on a constant directivity horn with a nominal coverage pattern of 90° (h) x 45° (v). An internal passive filter network shall provide fourth order acoustical crossover and system equalization.

System frequency response shall vary no more than ±3 dB from 200 Hz to 15 kHz measured on axis. The mid/high section shall produce a Sound Pressure Level (SPL) of 107 dB SPL on axis at 1 meter with a power input of 1 Watt and shall be capable of producing a peak output of 139 dB SPL on axis at 1 meter. The mid frequency section shall produce a Sound Pressure Level (SPL) of 109 dB SPL on axis at 1 meter with a power input of 1 Watt and shall be capable of producing a peak output of 141 dB SPL on axis at 1 meter. The high frequency section shall produce a Sound Pressure Level (SPL) of 109 dB SPL on axis at 1 meter with a power input of 1 Watt and shall be capable of producing a peak output of 136 dB SPL on axis at 1 meter. The mid/high section shall handle 450 Watts of amplifier power (continuous) and shall have a nominal impedance of 8 Ohms. The mid frequency section shall handle 400 Watts of amplifier power (continuous) and shall have a nominal impedance of 8 Ohms. The high frequency section shall handle 125 Watts of amplifier power (continuous) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of multi-ply, void-free, cross-grain-laminated, exterior grade, Baltic birch plywood and shall employ extensive internal bracing. It shall be finished in wear-resistant textured black paint. Input connectors shall be 2x 6-contact terminal barrier strips. Eighteen (18) 3/8"-16 threaded mounting/suspension points (4 each top, bottom and sides, 2 on back) shall be provided. The front of the loudspeaker shall be covered with a powder coated perforated steel grille.

The mid/high loudspeaker shall be the EAW model AS490e.

509130 (0)
5/10/01

Manufacturing tolerances are +/- 0.13 and +/- 1°

